

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

Application No.: To Be Assigned

Filing Date: To Be Assigned

Applicant: Jascob, et al.

Group Art Unit: To Be Assigned

Examiner: To Be Assigned

Title: METHOD AND APPARATUS FOR  
ELECTROMAGNETIC NAVIGATION OF A SURGICAL  
PROBE NEAR A METAL OBJECT

Attorney Docket: 5074A-000001/COB

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Director of the United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

**I. LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION**

The patents, publications and other information submitted for consideration by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

**II. COPIES**

A.        Submitted herewith is a legible copy of (i) each U.S. patent application publication and U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; (iii) for each cited pending U.S. application, the application specification including the claims, and any drawing of the application which caused it to be listed including the claims directed to that portion; and (iv) all other information or that portion which caused it to be listed.

B.   X   Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

U.S. Serial Number  
09/873,604

U.S. Filing Date  
June 4, 2001

C.  Because the present application was/is being filed after June 30, 2003, no copies of the U.S. patents or U.S. patent application publications which are listed on the attached Form 1449 are enclosed pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i). Any foreign patent documents or non-patent literature listed on the attached Form 1449 are enclosed herewith.

D.  This is a PCT application in the entry of the National Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search Report are listed on the attached Form-1449 for consideration by the Examiner and for listing on any patent resulting from this application. Since the International Search Report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g))

III. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

A.  Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).

B.  A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):

1.  See the attached foreign patent office communication from a counterpart foreign application:
2.  English translations are provided:
3.  Other:

C.  The following additional information is provided for the Examiner's consideration.

IV. CROSS REFERENCE TO RELATED APPLICATION(S)

A.  The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this(these) application(s) to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. § 122.

Serial No.

Filing Date

Art Unit

V. THIS IDS IS BEING FILED UNDER

A. X 37 C.F.R. § 1.97(b): (check only one box)

1. X within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.

2. \_\_\_\_ within three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.

3. \_\_\_\_ before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).

4. \_\_\_\_ before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.

B. \_\_\_\_ 37 C.F.R. § 1.97(c): (check only one box)

• before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.

1. \_\_\_\_ No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

2. \_\_\_\_ See the certification below. No fee is required.

C. \_\_\_\_ 37 C.F.R. § 1.97(d):

• after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.

1. \_\_\_\_ See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

VI. CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)

The undersigned hereby certifies that:

A. each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F.R. 1.704(d) below in section VII, if applicable; or

B. no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).

C. Some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.

VII. STATEMENT UNDER 37 CFR 1.704(d)

The undersigned hereby states that:

each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. 1.56(c) more than thirty days prior to the filing of this IDS.

VIII. PAYMENT OF FEES (check only one box)

A. A check in the amount of \$180.00 is enclosed for the above-identified fee.

B. Please charge Deposit Account No. 08-0750 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

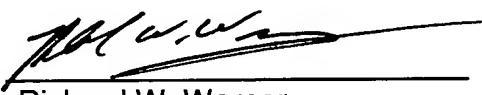
The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 08-0750.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 08-0750.

Respectfully submitted,

Dated: August 26, 2003

By:   
Richard W. Warner  
Reg. No. 38,043

HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. Box 828  
Bloomfield Hills, Michigan 48303  
(248) 641-1600

FORM HDP-1449 (Based on Form PTO-1449)		ATTORNEY DOCKET NO.	SERIAL NO.	
<b>PATENT AND TRADEMARK OFFICE</b> <b>INFORMATION DISCLOSURE CITATION</b> <small>(Use several sheets if necessary)</small>  Sheet 1 of 9		5074A-000001/COB	To Be Assigned	
		APPLICANT		
		Jascob, et al.		
		FILING DATE	GROUP	
		To Be Assigned	To Be Assigned	

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.		10/252,258	09/2002	Martinelli, et al.		
2.		3,674,014	07/1972	Tillander		
3.		3,868,565	02/1975	Kuipers		
4.		4,054,881	10/1977	Frederick H. Raab		
5.		4,173,228	11/1979	Van Steenwyk, et al.		
6.		4,262,306	04/1981	Karlheinz Renner		
7.		4,287,809	09/1981	Egli, et al.		
8.		4,314,251	02/1982	Raab		
9.		4,317,078	02/1982	Weed, et al.		
10.		4,339,953	07/1982	Iwasaki		
11.		4,396,885	08/1983	Constant		
12.		4,422,041	12/1983	Lienau		
13.		4,431,005	02/1984	McCormick		
14.		4,572,198	02/1986	Codrington		
15.		4,613,866	09/1986	Blood		
16.		4,618,978	10/1986	Cosman		
17.		4,642,786	02/1987	Hansen		
18.		4,649,504	03/1987	Krouglicof, et al.		
19.		4,737,794	04/1988	Jones		
20.		4,821,731	04/1989	Martinelli		
21.		4,836,778	06/1989	Baumrind, et al.		

Examiner:	Date Considered:
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EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Sheet 2 of 9

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
22.		4,849,692	07/1989	Blood		
23.		4,905,698	03/1990	Strohl, Jr., et al.		
24.		4,945,305	07/1990	Blood		
25.		4,977,655	12/1990	Martinelli		
26.		4,989,608	02/1991	Ratner		
27.		4,991,579	02/1991	Allen		
28.		5,002,058	03/1991	Martinelli		
29.		5,005,592	04/1991	Cartmell		
30.		5,016,639	05/1991	Allen		
31.		5,042,486	08/1991	Pfeiler, et al.		
32.		5,050,608	09/1991	Watanabe, et al.		
33.		5,054,492	10/1991	Scribner, et al.		
34.		5,059,789	10/1991	Salcudean		
35.		5,086,401	02/1992	Glassman, et al.		
36.		5,099,845	03/1992	Besz, et al.		
37.		5,105,829	04/1992	Fabian, et al.		
38.		5,152,288	10/1992	Hoenig, et al.		
39.		5,161,536	11/1992	Vilkomerson, et al.		
40.		5,187,475	02/1993	Wagener, et al.		
41.		5,197,476	03/1993	Nowacki, et al.		

Examiner:

Date Considered:

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Sheet 3 of 9

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
42.		5,198,768	03/1993	Keren		
43.		5,198,877	03/1993	Schulz		
44.		5,211,164	05/1993	Allen		
45.		5,211,165	05/1993	Dumoulin, et al.		
46.		5,214,615	05/1993	Bauer		
47.		5,222,499	06/1993	Allen, et al.		
48.		5,228,442	07/1993	Imran		
49.		5,249,581	10/1993	Horbal, et al.		
50.		5,251,635	10/1993	Dumoulin, et al.		
51.		5,253,647	10/1993	Takahashi, et al.		
52.		5,255,680	10/1993	Darrow, et al.		
53.		5,257,636	11/1993	White		
54.		5,265,610	11/1993	Darrow, et al.		
55.		5,265,611	11/1993	Hoenig, et al.		
56.		5,269,759	12/1993	Hernandez, et al.		
57.		5,271,400	12/1993	Dumoulin, et al.		
58.		5,273,025	12/1993	Sakiyama, et al.		
59.		5,274,551	12/1993	Corby, Jr.		
60.		5,279,309	01/1994	Taylor, et al.		
61.		5,295,483	03/1994	Nowacki, et al.		

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Sheet 4 of 9		To Be Assigned	To Be Assigned

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
62.		5,299,254	03/1994	Dancer, et al.		
63.		5,299,288	03/1994	Glassman, et al.		
64.		5,309,913	05/1994	Kormas, et al.		
65.		5,315,630	05/1994	Sturm, et al.		
66.		5,316,024	05/1994	Hirschi, et al.		
67.		5,318,025	06/1994	Dumoulin, et al.		
68.		5,325,873	07/1994	Hirschi, et al.		
69.		5,353,795	10/1994	Souza, et al.		
70.		5,368,030	11/1994	Zinreich, et al.		
71.		5,375,596	12/1994	Twiss, et al.		
72.		5,377,678	01/1995	Dumoulin, et al.		
73.		5,383,454	01/1995	Bucholz		
74.		5,386,828	02/1995	Owens, et al.		
75.		5,389,101	02/1995	Heilbrun, et al.		
76.		5,391,199	02/1995	Ben-Haim		
77.		5,402,801	04/1995	Taylor		
78.		5,408,409	04/1995	Glassman, et al.		
79.		5,417,210	05/1995	Funda, et al.		
80.		5,419,325	05/1995	Dumoulin, et al.		
81.		5,425,367	06/1995	Shapiro, et al.		

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Sheet 5 of 9		To Be Assigned	To Be Assigned

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
82.		5,425,382	06/1995	Golden, et al.		
83.		5,429,132	07/1995	Guy, et al.		
84.		5,437,277	08/1995	Dumoulin, et al.		
85.		5,443,066	08/1995	Dumoulin, et al.		
86.		5,443,489	08/1995	Ben-Haim		
87.		5,445,144	08/1995	Wodicka, et al.		
88.		5,445,150	08/1995	Dumoulin, et al.		
89.		5,445,166	08/1995	Taylor		
90.		5,453,686	09/1995	Anderson		
91.		5,456,718	10/1995	Szymaitis		
92.		5,480,422	01/1996	Ben-Haim		
93.		5,483,951	01/1996	Kelly, et al.		
94.		5,487,729	01/1996	Avellanet, et al.		
95.		5,513,637	05/1996	Twiss, et al.		
96.		5,517,990	05/1996	Kalfas, et al.		
97.		5,542,938	08/1996	Avellanet, et al.		
98.		5,546,951	08/1996	Ben-Haim		
99.		5,558,091	09/1996	Acker, et al.		
100.		5,568,809	10/1996	Ben-Haim		
101.		5,572,999	11/1996	Funda, et al.		

Examiner:	Date Considered:
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<b>FORM HDP-1449 (Based on Form PTO-1449)</b> <b>PATENT AND TRADEMARK OFFICE</b> <b>INFORMATION DISCLOSURE CITATION</b> <small>(Use several sheets if necessary)</small> Sheet 6 of 9		ATTORNEY DOCKET NO.	SERIAL NO.
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<b>U.S. PATENT DOCUMENTS</b>						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
102.		5,588,430	12/1996	Bova		
103.		5,592,939	01/1997	Martinelli		
104.		5,600,330	02/1997	Blood		
105.		5,603,318	02/1997	Heilbrun, et al.		
106.		5,617,857	04/1997	Chader, et al.		
107.		5,622,169	04/1997	Golden, et al.		
108.		5,622,170	04/1997	Schulz		
109.		5,630,431	05/1997	Taylor		
110.		5,640,170	06/1997	Anderson		
111.		5,645,065	07/1997	Shapiro, et al.		
112.		5,647,361	07/1997	Damadian		
113.		5,662,111	09/1997	Cosman		
114.		5,676,673	10/1997	Ferre		
115.		5,694,945	12/1997	Ben-Haim		
116.		5,695,500	12/1997	Taylor		
117.		5,711,299	01/1998	Manwaring, et al.		
118.		5,713,946	02/1998	Ben-Haim		
119.		5,729,129	03/1998	Acker		
120.		5,730,129	03/1998	Darrow, et al.		
121.		5,730,130	03/1998	Fitzpatrick, et al.		

Examiner:	Date Considered:
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FORM HDP-1449 (Based on Form PTO-1449) <b>PATENT AND TRADEMARK OFFICE</b> <b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary) Sheet 7 of 9		ATTORNEY DOCKET NO.	SERIAL NO.
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U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
122.		5,732,703	03/1998	Kalfas, et al.		
123.		5,738,096	04/1998	Ben-Haim		
124.		5,740,808	04/1998	Panescu, et al.		
125.		5,744,953	04/1998	Hansen		
126.		5,749,362	05/1998	Funda, et al.		
127.		5,752,513	05/1998	Acker, et al.		
128.		5,758,667	06/1998	Slettenmark		
129.		5,762,064	06/1998	Polvani		
130.		5,767,669	06/1998	Hansen, et al.		
131.		5,776,064	07/1998	Kalfas, et al.		
132.		5,787,886	08/1998	Kelly, et al.		
133.		5,800,352	09/1998	Ferre, et al.		
134.		5,803,089	09/1998	Ferre, et al.		
135.		5,810,728	09/1998	Kuhn		
136.		5,829,444	11/1998	Ferre, et al.		
137.		5,831,260	11/1998	Hansen		
138.		5,833,608	11/1998	Acker		
139.		5,836,954	11/1998	Heilbrun, et al.		
140.		5,840,024	11/1998	Taniguchi, et al.		
141.		5,840,025	11/1998	Ben-Haim		

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449) <b>PATENT AND TRADEMARK OFFICE</b> <b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)  Sheet 8 of 9		ATTORNEY DOCKET NO.	SERIAL NO.
		5074A-000001/COB	To Be Assigned
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U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
142.		5,851,183	12/1998	Bucholz		
143.		5,868,674	02/1999	Glowinski		
144.		5,871,445	02/1999	Bucholz		
145.		5,873,822	02/1999	Ferre, et al.		
146.		5,891,034	04/1999	Bucholz		
147.		5,913,820	06/1999	Bladen, et al.		
148.		5,920,395	07/1999	Schulz		
149.		5,950,629	09/1999	Taylor, et al.		
150.		5,954,647	09/1999	Bova, et al.		
151.		5,967,980	10/1999	Ferre, et al.		
152.		5,976,156	11/1999	Taylor		
153.		5,987,349	11/1999	Schulz		
154.		6,019,725	02/2000	Vesely, et al.		
155.		6,024,695	02/2000	Taylor		
156.		6,059,718	05/2000	Taniguchi, et al.		
157.		6,104,944	08/2000	Martinelli		
158.		6,122,538	09/2000	Sliwa, et al.		
159.		6,161,032	12/2000	Acker		
160.		6,172,499	01/2001	Ashe		
161.		6,201,987	03/2001	Dumoulin		

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Sheet 9 of 9			

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
162.		6,233,476	05/2001	Strommer, et al.		
163.		6,246,231	06/2001	Ashe		
164.		6,437,567	08/2002	Schenck, et al.		
165.		6,493,573	12/2002	Martinelli, et al.		

FOREIGN PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes No
1.		WO 91/07726	05/1991	PCT		
2.		WO 92/06645	04/1992	PCT		
3.		WO 94/04938	03/1994	PCT		
4.		EP 0419729	09/1988	EPO		
5.		EP 0655138	08/1993	EPO		
6.		EP 0894473	01/1995	EPO		

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
1.		Edward C. Benzel, et al. "Magnetic Source Imaging: A Review of the MagneS System of Biomagnetic Technologies Incorporate," Neurosurgery, Vol. 33, No. 2, Pages 252-259 (August 1993)

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